202306UECM1404OE2a

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Review of preview

Started on	Wednesday, 19 July 2023, 07:34 PM
Completed on	Wednesday, 19 July 2023, 07:34 PM
Time taken	6 secs
Grade	**0** out of a maximum of 10 (**0**%)

1
Marks: 1

At an annual effective interest rate of 6.3%, an annuity-immediate with 4n level annual payments of 1000 has present value of 14,113. Determine the fraction of the total present value represented by the first set of N payments and third set of N payments combined. _____

Answer:

Make comment or override grade

Incorrect
Correct answer: 0.634112
Marks for this submission: 0/1.

2
Marks: 1

An investment requires an initial payment of 80,000 and annual payments of 8,000 at the end of the first 15 years. Starting at the end of the 16-th year, the investment returns 10 equal payments of X. Determine X to yield an annual effective rate of 6% over the 25-year period. _____

Answer:

Make comment or override grade

Incorrect
Correct answer: 51348.905507
Marks for this submission: 0/1.

3
Marks: 1

Tom borrows 100 at an annual effective interest rate of 5% and agrees to repay it with 30 annual installments. the amount of each payment in the last 20 years is set at twice that in the first 10 years.
At the end of 10 years. Tom has the the option to repay the entire loan with a final payment X, in addition to the regular payment. This will yield the lender an annual effective rate of 5.5% over the 10-year period.
Calculate X. _____

Answer:

Make comment or override grade

Incorrect
Correct answer: 114.890977
Marks for this submission: 0/1.

4
Marks: 1

Deposits of 100 are made every month for 5 years into an account crediting interest at a nominal rate of 9% convertible monthly. Starting one month after the last deposit, monthly withdrawals of X are made for 10 years, exhausting the account. Determine X. _____

Answer:

Make comment or override grade

Incorrect
Correct answer: 95.54
Marks for this submission: 0/1.

5 Marks: 1

Tom borrows 200 at an annual effective interest rate of 4% and agrees to repay it with 35 annual installments. The amount of each payment in the last 23 years is set at twice that in the first 12 years. At the end of 12 years, Tom has the option to repay the entire loan with a final payment X, in addition to the regular payment. This will yield the lender an annual effective rate of 5.0% over the 12-year period. Calculate X. _____

Answer:

Make comment or override grade

Incorrect
Correct answer: 245.25
Marks for this submission: 0/1.

6 Marks: 1

Kelvin wish to accumulate 79,000 in a fund at the end of 30 years. She plans to deposit 66 into the fund at the end of of each of the first 144 months. He then plans to deposit 66 + k into the fund at the end of each of the last 216 months. Assume the fund earns interest at an annual effective rate 5.73%. Determine k. _____

Answer:

Make comment or override grade

Incorrect
Correct answer: 48.552121
Marks for this submission: 0/1.

7 Marks: 1

Deposits of 2000 are placed into a fund at the beginning of each year for 34 years. At the end of 43th years, annual payments commence and continue forever. Interest is at an effective annual rate of 3%. Calculate the annual payment. _____

Answer:

Make comment or override grade

Incorrect
Correct answer: 4519.487173
Marks for this submission: 0/1.

8 Marks: 1

Kenton borrows 230,000 on January 1, 2023 to be repaid in 24 semiannual annual installments at an effective annual rate of interest of 11%. The first payment is due on July 1, 2023. Instead of semiannual payment he decides to make monthly payments equal to one-sixth of the semiannual payment beginning on February 1, 2023. Determine how many months will be needed to pay off the loan. _____

Answer:

Make comment or override grade

Incorrect
Correct answer: 137.863956
Marks for this submission: 0/1.

9 Marks: 1

You took a loan of 300,000 which required to pay 40 equal annual payments at 12% interest. The payments are due at the end of each year. The bank sold your loan to an investor immediately after receiving your 6th payment. With yield to the investor of 7%, the price the investor pay was 467,771. Determine the bank's overall return on its investment. _____

Answer:

Make comment or override grade

Incorrect
Correct answer: 0.1805
Marks for this submission: 0/1.

10 Marks: 1

A loan of amount 15000 with annual effective interest rate of 8%, made at time t=0, is to be repaid by 13 annual payments of R, beginning at time t = 1 and ending at time t = 13. At time t=5, the borrower has financial troubles and can only pay (R-949.39). If he then returns to his original payment schedule of 1 at times t=6 through t=12, how much will his payment at time t =13 need to be in order to pay the loan off in full? _____

Answer:

Make comment or override grade

Incorrect
Correct answer: 3655.08

Marks for this submission: 0/1.